



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

U/R
ML
SBB 25/20

D5762-11
Job Sheet 207380



POSITIVE RECALL



Part No: D5762-11

Job Qty: 40 pcs

EFFECTIVE _____ **AUTH** _____

Part Name: Stop Bracket

RELEASED _____ **DATE** _____



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/25/20

Job Tracking No:

Due Date: 3/6/20

Created By: Jennifer Renwick

Type: Stock

Description:

Note: URF 2020-525 Was PN: 78633-05 DWG D5762 REV.A IPP REV:A 19.12.20 NEW ISSUE JV VERF:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Large Fab - Welded Assy-1	40 pcs	3/6/20	3/6/20	0.00	4.00	Large Fab - 14		ML
110	QC 5	40 pcs	3/6/20	3/6/20	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		
120	Packaging 3-1 - Stock - B4B	40 pcs	3/6/20	3/6/20	0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		
							Packaging 3 - 8 - B4B		
							Packaging 3 - 9 - B4B		
							Packaging 3 - 10 - B4B		
							Packaging 3 - 11 - B4B		ML

DART
AEROSPACE

Part No: S250016



Job No: 5762-11

Job Sheet: 207380

Lot/Batch: S260016

REV: A

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

DAS
MAR 03 2020 40
9:59

18:

Date: 03/03/20

Plex 2/25/20 12:34 PM Dart.lajeunesse.marie

				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
				QC 21 - SA - 21	D4S
				QC 21 - SA - 70	21
				QC 21 - SA - 53	9-20
130	QC 21 - SA	40 pcs	3/6/20	0.00 0.00	

MAR 03 2020

Part Op **100** - 1- Fabricate per D5762 Drwg 2- Deburr
 Descriptions: **110** - QC5- Inspect part completeness to step on W/O
120 - Identify as per dwg & Stock Location: *WA 004*
130 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304TS0.750W.035	Square Tubing, 0.750 X 0.035 Wall mat'I don't come in this size	2.4120 ft (.0603 ea)	100-Large Fab - Welded Assy-1	5242147

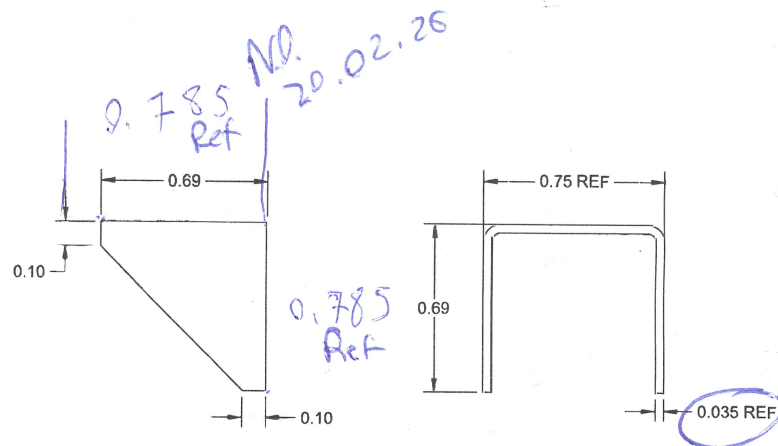
Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Large Fab - Welded Assy-1	M304TS0.750W.035	2	0	0

Part Specifications

Specifications could not be found.

Plex 2/25/20 12:34 PM Dart.lajeunesse.marie



D5762-11 STOP BRACKET
(DERIVED FROM AERO DESIGN P/N 78633-05)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 207380 M15
20-02-25

UNDER REVIEW

URF 2020-524 20.02.20 (NO)

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBING, 0.75 X 0.75 X 0.035 WALL
PER ASTM A554 OR ASTM A269
REF DART SPEC M304TS
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.01 lbs

RELEASED

2020 FEB 19

APPROVED

DESIGN	ZF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	NO	DRAWING NO.	REV. A
MFG. APPR.	DD	D5762	SHEET 11 OF 14
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	AFT BEAM	NTS
DATE	19.12.17	COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT ITS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

207 619



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB045275



Supplier: MES002-VC
Metaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045275

PO Date: 12/2/19

Due Date: 12/12/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

DEC 04 2019

Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M304TS0.750W.049			304 Sq Tube .75X.75X.049W : MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBING AS PER ASTM A554 MILL FINISH OR ASTM A269 MILL FINISH receive ft	Firmed	-	12/12/19	300 ft	0 ft	300 ft	\$3.80/ft	\$1,140.00
										300 ft 603		DAS 82 9-89 DEC 19 2019	
2		M304B0.250x0.500			304 Bar .250 X .500 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	12/12/19	400 ft	0 ft	400 ft	\$4.25/ft	\$1,700.00
										415 ft 603		DAS 82 9-89 DEC 19 2019	
3		M4130NB0.500X03.000			4130 Bar 0.500 X 3.00 : MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528 CUT TO SIZE 14" receive ft	Firmed	-	12/12/19	46.667 ft	0 ft	47 ft	\$29.07/ft	\$1,426.80
										47 ft 603		DAS 82 9-89 DEC 19 2019	
Line Item Note 40 PCS CUT TO SIZE 14" = 46.6666 FT													
4		MSTEEL-A2- B0.500X1.250	MSTEEL-A2		AISI A2 Tool Steel Bar, 0.500 X 1.250 : MATERIAL: AISI A2 STEEL, ANNEALED CONDITION AS PER ASTM A681 receive ft	Firmed	-	12/12/19	36 ft	0 ft	36 ft	\$15.99/ft	\$575.64
										36 ft 603		DAS 82 9-89 DEC 19 2019	
												Grand Total:	\$4,042.44



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB045275



Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

CL

Plex 12/2/19 9:56 AM Dart.Lavoie.Chantal

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7
Tel.: 450 641-3330

Shipping Order

16/12/2019

Order : 149009
Reference : POHB045275
Ship : PICK UP / PICK UP

Customer: 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
SSQT34340494	304 SQ TUBE .750 X .049 WALL 15 X 20' ***** HT, <u>FBK60595</u>	300	<u>300</u>	<u>0</u>
SF14124HR	304 STAIN FLA .25" X .500" HR 34 X 12' R/L HT, <u>56161555</u>	425	<u>425</u>	<u>0</u>
MP124130N	4130 NORM PLATE .500 THICK AMS 6345 40 X 3" X 14" HT, <u>248571</u>	11.68	<u>11.68</u>	<u>0</u>
TP12A2	A-2 PLATE TFA 1/2" THICK 4 X 1.25" -0+.065" X 117" HT, <u>9919020379b-8-1</u>	102	<u>102</u>	<u>0</u>
	LIVRE AVEC AUTRE COMMANDE JP			

DAS
82
9-89

DEC 18 2019

Shipping : _____
Package No : _____
Merchandise Received: _____

Ref. : _____

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M 304 TSO. 750W. 049 PO / BATCH NO.: POH15045275
 DATE: DEC 19 2019 5242147

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 300 ft
 QUANTITY INSPECTED: 300 ft
 QUANTITY REJECTED: —

THICKNESS ORDERED: .75 x .75 x .049w
 THICKNESS RECEIVED: .75 x .75 x .049w
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	ASTM A455 ASSY
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	HIT TBR 60595
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>82</u> <u>9-89</u> DATE: <u>DEC 19 2019</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

③

LIME 1

M304TS 0.750W0.049

POHB 045275

H/T

TBK 60595

DAS
82
9-89

DEC 18 2019

PURCHASE MATERIAL: ASTM A554 MILL FINISH
ASTM A289 MILL FINISH

FINISH:

OR

WHERE: A.AAA = WIDTH IN INCHES
.TTT = WALL THICKNESS IN INCHES

PART NUMBER:

M304TS | A.AAA | W | .TTT
| WIDTH | WALL

PART NUMBER:

EG. 0.75" X 0.75" X 0.049 WALL = M304TS0.750W.049

RELEASED
2014-05-26

D	"SEAMLESS" REMOVED FROM PURCHASE MATERIAL SPECIFICATION (SEE NCR14-3818)	DB	14.06.20
C	"SEAMLESS" ADDED TO PURCHASE MATERIAL. ASTM A289 ADDED TO FINISH. REASON: SPEC ADDED FOR 1/2" TUBING	AJS	08.10.16
B	DRAWING MOVED TO "B" SIZE BORDER. FINISH ADDED (SEE NCR 08-048 FOR DETAILS).	AJS	08.08.28
A	NEW ISSUE	DS	01.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. M304TS REV. D SHEET 1 OF 1 TITLE 304/316 SQUARE TUBING SCALE NONE COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR DISSEMINATED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	DB		
CHECKED	DB		
MFG. APPR.	DB		
APPROVED	DB		
DE APPR.	DB		
DATE	14.05.20		

LINE 1
W0001

PON3045275



INSPECTION CERTIFICATE

EN 10204-3.1:2004

No.270, Sec.4, Jungshan Rd., Shijou Shiang,
Chang-Hwa, Taiwan, R.O.C
http://www.ycinox.com
TEL : +886-4-8899666 FAX : +886-4-8899770



Customer					Customer No.	FCA027	Certificate No.	190626P0188
Product	STAINLESS STEEL WELDED TUBE				Commercial Invoice No.	J19060067	Date of Issue	2019/06/27
Specification	ASTM A554-16 DAS 82				PO No.	P012080(ADD)	Order No.	EP19050182-1
Steel Grade	MT-304	9-89	Finish	MILL	P.I.No.	PI 1905-126	Weight No.	C19060229

Item No.	Heat No.	Product Description Dimension	Quantity Pcs	Chemical Composition(%)								Tension Test			*01
				C	Si	Mn	P	S	Ni	Cr	0.2% Y.S.	T.S.	E.L.		HR
				X10 ⁻³	X10 ⁻³	X10 ⁻³	X10 ⁻³	X10 ⁻³	X10 ⁻³	X10 ⁻²	MPa		%		HRB
		Specification	Min. Max.	80 150	100 42	200 106	45 33	30 2	1100 811	1800 1814					
1	TBK060595	3/4" (19mm) x 3/4" (19mm) x 0.049" (1.25mm) x 20FT	150	54	42	106	33	2	811	1814	294	674	58	87	
TOTAL:			150												

Remark	Note
	<p>Tensile test value refers to raw material. Hardness test value refers to raw material.</p> <p>*01 = Hardness Test *Gauge Length: 50mm</p> <p>Visual inspection(Surface) and Dimension Check : OK</p> <p>1MPa=1N/mm²=10bar=145psi=10.2kgf/cm²</p>

Surveyor By	We hereby certify that material described herein has been manufactured and tested with satisfactory results in accordance with the requirement of the above material specification. The material described above has been found free of radiation by raw material supplier.	<p>1.ISO 9001:2015 (No.01 100 056299)</p> <p>2.PED / AD2000 (No.01 202 TWINQ-05 0105)</p> <p>3.ISO 14001:2004 (No.01 104 822 096385)</p> <p>4.OHSAS 18001:2007 (No.01 113 822 098385)</p>	Manager of Quality Assurance Department
N/A			Darren Tsai

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: <u>297380</u> Part No. <u>D5762-11</u>		DISPOSITION Rework <input checked="" type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>		DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input checked="" type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input checked="" type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/> </div> </div>					
Date :		Sequence #:		QTY Affected :			MRB (QSI042)		
Description Work Order Deviation				Disposition				W.D. 20.02.26 Completed By Lead hand / Supervisor QC / QA Coordinator	
D5762-11 calls for 0.75x0.75x0.035 stainless tubing. Tubing not procurable at this wall thickness				Acceptable to use 0.75x0.75x0.049 AISI 304/316 stainless steel tubing. Dwg will be updated to match					
Root Cause Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Preservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/>		FAULT CATEGORY <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread </div> </div>							
		Other/Details:							